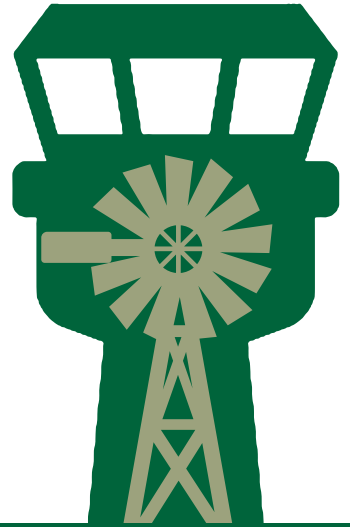# DIGITAL TRENDS SHAPING AGRICULTURAL TECHNOLOGY

In recent times agricultural production had to evolve technologically to keep up with rising food demands. Technology in agriculture, or agtech, is already contributing substantially to growth in the agricultural sector. Through the use of disruptive technology in the fields of biotechnology, informatics, robotics and drones, efficiencies are considerably improved.

Big data

Information and communication technology plays an integral part in successful smart farming. New technologies, such as the internet of things, cloud computing, robotics and artificial intelligence aid agricultural production. Core to these technological advances is big data, which is collected through the use of smart sensors and smart devices, analysed and used in decision-making across the entire supply chain.

Geospatial World predicts that by 2050 the global population will be around 10 billion, and that current agricultural production will have to be doubled to accommodate the growing population. Site precision crop management, or precision farming, is enhanced through

Drones reshape agricultural productivity

the adoption of drone technology. Drones fitted with high-resolution cameras and precision sensors gather data to help identify crop stress or pest damage. Farmers are able to efficiently monitor their farms, helping to improve decision-making at all stages.

Mobile apps

Commercial and smallholder farmers benefit hugely from mobile app technology geared for agriculture, helping farmers to mitigate risks and reduce negative business impact.

Farmboek
Provides advice from plant pathologists, entomologists and feed specialists for planting, pest control and fertilising for crops and livestock.

ARC Hub
The Agricultural Research Council (ARC) app has been officially rolled out in May 2018, and is available on the app stores. Farmers can identify their location through GPS to be linked to specific advisors in the area, and can also notify authorities about the emergence of a specific pest.

Rain 4 Africa
Assists small-scale farmers in their decision-making by sending weather and agricultural data to farmers as text messages.

Farmers who embrace new technology are better equipped to transform their business processes, increase performance and enhance their customer experience.

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